

SSSSSSSSSSSSSS	000000000	RRRRRRRRRRRR	TTTTTTTTTTTTTT	3333333333	2222222222
SSSSSSSSSSSSSS	000000000	RRRRRRRRRRRR	TTTTTTTTTTTTTT	3333333333	2222222222
SSSSSSSSSSSSSS	000000000	RRRRRRRRRRRR	TTTTTTTTTTTTTT	3333333333	2222222222
SSS	000	RRR	TTT	333	222
SSS	000	RRR	TTT	333	222
SSS	000	RRR	TTT	333	222
SSS	000	RRR	TTT	333	222
SSS	000	RRR	TTT	333	222
SSS	000	RRR	TTT	333	222
SSSSSSSSSS	000	RRRRRRRRRRRR	TTT	333	222
SSSSSSSSSS	000	RRRRRRRRRRRR	TTT	333	222
SSSSSSSSSS	000	RRRRRRRRRRRR	TTT	333	222
SSS	000	RRR	TTT	333	222
SSS	000	RRR	TTT	333	222
SSS	000	RRR	TTT	333	222
SSS	000	RRR	TTT	333	222
SSS	000	RRR	TTT	333	222
SSS	000	RRR	TTT	333	222
SSSSSSSSSSSSSS	000000000	RRR	TTT	3333333333	22222222222222
SSSSSSSSSSSSSS	000000000	RRR	TTT	3333333333	22222222222222
SSSSSSSSSSSSSS	000000000	RRR	TTT	3333333333	22222222222222

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SSSSSSSS 000000 RRRRRRRR TTTTTTTTTT MM MM EEEEEEEEE RRRRRRRR GGGGGGGG EEEEEEEEE
SSSSSSSS 000000 RRRRRRRR TTTTTTTTTT MM MM EEEEEEEEE RRRRRRRR GGGGGGGG EEEEEEEEE
SS 00 00 RR RR
SS 00 00 RR RR
SS 00 00 RR RR
SSSSSS 00 00 RRRRRRRR
SSSSSS 00 00 RRRRRRRR
SS 00 00 RR RR
SS 00 00 RR RR
SS 00 00 RR RR
SSSSSSSS 000000 RRR RR TTT MM MM EEEEEEEEE RRR RR GGGGGG EEEEEEEEE
SSSSSSSS 000000 RRR RR TTT MM MM EEEEEEEEE RRR RR GGGGGG EEEEEEEEE

MM MM AAAA PPPPPPP
MM MM AAAA PPPPPPP
MMMM MMM AA AA PP PP
MMMM MMM AA AA PP PP
MM MM AA AA PP PP
MM MM AA AA PPPPPPP
MM MM AA AA PPPPPPP
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+-----+
! Object Module Synopsis !
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Module Name	Ident	Bytes	File	Creation Date	Creator
SORTSHR	V04-000	0	[SORT32.OBJ] SORTSHR.EXE;1	16-SEP-1984 04:16	VAX-11 Linker V04-00
LIBRTL	V04-000	0	\$_255\$DUA28:[SYSLIB] LIBRTL.EXE;1	16-SEP-1984 04:00	VAX-11 Linker V04-00
SOR\$ENTRY	V04-000	1312	[SORT32.OBJ] SORTMERGE.OLB;1	16-Sep-1984 00:23	VAX-11 Bliss-32 V4.0-742
SOR\$COMMAND	V04-000	3753	[SORT32.OBJ] SORTMERGE.OLB;1	16-Sep-1984 00:45	VAX-11 Bliss-32 V4.0-742
UTIL\$CHK_CLI	V04-000	2145	[SORT32.OBJ] SORTMERGE.OLB;1	16-Sep-1984 00:48	VAX-11 Bliss-32 V4.0-742
SOR\$OUTPUT	V04-000	163	[SORT32.OBJ] SORTMERGE.OLB;1	16-SEP-1984 01:18	VAX/VMS Macro V04-00
LIB\$FIXUP_DEC	V04-000	788	[SORT32.OBJ] SORTMERGE.OLB;1	16-SEP-1984 01:19	VAX/VMS Macro V04-00
CLI\$INTERFACE	V04-000	516	\$_255\$DUA28:[SYSLIB] STARLET.OLB;2	16-Sep-1984 00:32	VAX-11 Bliss-32 V4.0-742
CLI\$GLOBALS	V04-000	0	\$_255\$DUA28:[SYSLIB] STARLET.OLB;2	15-SEP-1984 23:38	VAX/VMS Macro V04-00
LIB\$MSGDEF	2-018	0	\$_255\$DUA28:[SYSLIB] STARLET.OLB;2	15-SEP-1984 23:43	VAX-11 Message V04-00
SYSSP1_VECTOR	V04-000	0	\$_255\$DUA28:[SYSLIB] STARLET.OLB;2	16-SEP-1984 00:40	VAX/VMS Macro V04-00

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+-----+
! Image Section Synopsis !
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Cluster	Type	Pages	Base Addr	Disk VBN	PFC	Protection and Paging	Global Sec. Name	Match	Majorid	Minorid
SORTSHR	3	78	00000000-R	0	0	READ ONLY	SORTSHR_001	LESS/EQUAL	2	26
	4	1	00009C00-R	0	0	READ WRITE COPY ON REF	SORTSHR_002	LESS/EQUAL	2	26
	4	1	P-00009E00-R	0	0	READ WRITE COPY ON REF	SORTSHR_003	LESS/EQUAL	2	26
	2	1	0000A000-R	0	0	READ WRITE FIXUP VECTORS	SORTSHR_004	LESS/EQUAL	2	26
LIBRTL	3	111	00000000-R	0	0	READ ONLY	LIBRTL_001	LESS/EQUAL	1	11
	4	1	0000DE00-R	0	0	READ WRITE DEMAND ZERO	LIBRTL_002	LESS/EQUAL	1	11
CODE	0	17	00000200	2	0	READ ONLY				
DEFAULT_CLUSTER	0	1	00002400	19	0	READ WRITE COPY ON REF				
	0	1	00002600	20	0	READ WRITE FIXUP VECTORS				
	253	20	7FFFD800	0	0	READ WRITE DEMAND ZERO				

Key for special characters above:

+-----+
! R - Relocatable !
! P - Protected !
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+-----+
! Program Section Synopsis !
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Psect Name	Module Name	Base	End	Length	Align	Attributes
SCODES		00000200	00001743	00001544 (5444.)	PIC,USR,CON,REL,GBL, SHR, EXE, RD,NOWRT,NOVEC
	SOR\$ENTRY	00000200	000004A0	000002A1 (	673.)	
	SOR\$COMMAND	000004A4	00000E67	000009C4 (	2500.)	
	UTIL\$CHK_CLI	00000E68	0000153F	000006D8 (	1752.)	
	CLIS\$INTERFACE	00001540	00001743	00000204 (	516.)	
\$PLITS		00001744	00001E8B	00000748 (	1864.)	PIC,USR,CON,REL,GBL, SHR, EXE, RD,NOWRT,NOVEC
	SOR\$ENTRY	00001744	0000197A	00000237 (	567.)	
	SOR\$COMMAND	0000197C	00001E1F	000004A4 (	1188.)	
	UTIL\$CHK_CLI	00001E20	00001E8B	0000006C (	108.)	
SOR\$RO_CODE		00001E8C	00001F2E	000000A3 (	163.)	PIC,USR,CON,REL,GBL, SHR, EXE, RD,NOWRT,NOVEC
	SOR\$OUTPUT	00001E8C	00001F2E	000000A3 (	163.)	
_LIB\$CODE		00001F30	00002243	00000314 (	788.)	PIC,USR,CON,REL,GBL, SHR, EXE, RD,NOWRT,NOVEC
	LIB\$FIXUP_DEC	00001F30	00002243	00000314 (	788.)	
\$OWNS		00002400	000025A8	000001A9 (	425.)	NOPI,USR,CON,REL,LCL,NOSHR,NOEXE, RD, WRT,NOVEC
	SOR\$ENTRY	00002400	00002447	00000048 (	72.)	
	SOR\$COMMAND	00002448	00002488	00000041 (	65.)	
	UTIL\$CHK_CLI	0000248C	000025A8	0000011D (	285.)	

+-----+
! Symbol Cross Reference !
+-----+

Symbol	Value	Defined By	Referenced By ...
CHK\$CHKPNT	00000000		WK-UTIL\$CHK_CLI
CHK\$CRECHK	00000000		WK-UTIL\$CHK_CLI
CHK\$ NOTINIT	00000000		WK-UTIL\$CHK_CLI
CLISDCL_PARSE	0000160F-R	CLISINTERFACE	
CLISDISPATCH	000016C0-R	CLISINTERFACE	
CLISGET_VALUE	00001583-R	CLISINTERFACE	SOR\$COMMAND
CLISNEXT_QUAL	00001701-R	CLISINTERFACE	SOR\$COMMAND
CLISPRESENT	00001540-R	CLISINTERFACE	SOR\$COMMAND
CLIS_ABSENT	000381F0	CLISGLOBALS	UTIL\$CHK_CLI
CLIS_COMMA	0003FD39	CLISGLOBALS	UTIL\$CHK_CLI
CLIS_CONCAT	0003FD29	CLISGLOBALS	UTIL\$CHK_CLI
CLIS_DEFAULTED	0003FD21	CLISGLOBALS	
CLIS_FACILITY	00000003	CLISGLOBALS	
CLIS_INVQUAL	0003880A	CLISGLOBALS	
CLIS_INVREQTYP	00038822	CLISGLOBALS	
CLIS_IVCHAR	00038050	CLISGLOBALS	
CLIS_IVVALU	00038088	CLISGLOBALS	
CLIS_LOCNEG	00038230	CLISGLOBALS	
CLIS_LOCPRES	0003FD31	CLISGLOBALS	
CLIS_NEGATED	000381F8	CLISGLOBALS	
CLIS_NOCOMD	000380B0	CLISGLOBALS	
CLIS_PRESENT	0003FD19	CLISGLOBALS	
CLIS_SPAWNED	0003FD01	CLISGLOBALS	
CLIS_VALCNVERR	00038832	CLISGLOBALS	
CLI_BEGIN	00000E68-R	UTIL\$CHK_CLI	
CLI_END	00000EA1-R	UTIL\$CHK_CLI	
CLI_GET_VALUE	00000ECD-R	UTIL\$CHK_CLI	
CLI_NEXT_QUAL	00001093-R	UTIL\$CHK_CLI	
CLI_PRESENT	00000FB8-R	UTIL\$CHK_CLI	
LIB\$FIXUP_DEC	00001F51-R	LIB\$FIXUP_DEC	
LIB\$FIXUP_FLT	00002688-RX	LIBRTL	
LIB\$FREE_VM	00002674-RX	LIBRTL	
LIB\$GET_VM	00002678-RX	LIBRTL	
LIB\$SIGNAL	00002684-RX	LIBRTL	
LIB\$SYS TRNLOG	0000267C-RX	LIBRTL	
LIB\$ BADSTA	00158204	LIB\$MSGDEF	
PRINT_STATS	00000390-R	SOR\$ENTRY	
SOR\$COMMAND	000004B7-R	SOR\$COMMAND	
SOR\$OUTPUT	00001E8E-R	SOR\$OUTPUT	
SOR\$BEGIN_MERGE	00002648-RX	SORTSHR	
SOR\$BEGIN_SORT	0000264C-RX	SORTSHR	
SOR\$END_SORT	0000265C-RX	SORTSHR	
SOR\$ENTRY	000002B1-R	SOR\$ENTRY	
SOR\$GK_ADDRESS	00000004	SORTSHR	
SOR\$GK_INDEX	00000003	SORTSHR	
SOR\$GK_RECORD	00000001	SORTSHR	
SOR\$GK_TAG	00000002	SORTSHR	
SOR\$K_IDENT	00000000	SORTSHR	
SOR\$K_INI_RUNS	00000008	SORTSHR	

Symbol	Value	Defined By	Referenced By ...
SORSK_LRL_INP	00000004	SORTSHR	SOR\$ENTRY
SORSK_LRL_INT	00000005	SORTSHR	SOR\$ENTRY
SORSK_LRL_OUT	00000006	SORTSHR	SOR\$ENTRY
SORSK_MRG_ORDER	00000009	SORTSHR	SOR\$ENTRY
SORSK_MRG_PASSES	0000000A	SORTSHR	SOR\$ENTRY
SORSK_NODES	00000007	SORTSHR	SOR\$ENTRY
SORSK_REC_INP	00000001	SORTSHR	SOR\$ENTRY
SORSK_REC_OUT	00000003	SORTSHR	SOR\$ENTRY
SORSK_REC_SOR	00000002	SORTSHR	SOR\$ENTRY
SORSK_WRK_ALQ	0000000B	SORTSHR	SOR\$ENTRY
SORSK_EBCDIC	00000002	SORTSHR	SOR\$COMMAND
SORSK_LOAD_FILL	00000200	SORTSHR	SOR\$COMMAND
SORSK_MULTT	00000004	SORTSHR	SOR\$COMMAND
SORSK_NODUPS	00000040	SORTSHR	SOR\$COMMAND
SORSK_SEQ_CHECK	00000010	SORTSHR	SOR\$COMMAND
SORSK_STABLE	00000001	SORTSHR	SOR\$COMMAND
SORSK_PASS_FILES	00002650-RX	SORTSHR	SOR\$COMMAND
SORSK_SORT_MERGE	00002660-RX	SORTSHR	SOR\$ENTRY
SORSK_SPEC_FILE	00002654-RX	SORTSHR	SOR\$COMMAND
SORSK_STAT	00002658-RX	SORTSHR	SOR\$ENTRY
SORSK_ROPRAND	001C8142	SORTSHR	SOR\$ENTRY
SORSK_FACILITY	0000001C	SORTSHR	SOR\$ENTRY
STR\$ANALYZE_SDESC	00002670-RX	LIBRTL	CLIS\$INTERFACE
STR\$COPY_DX	0000266C-RX	LIBRTL	CLIS\$INTERFACE
STR\$COPY_R	00002680-RX	LIBRTL	SOR\$COMMAND
SYSSCALL_HANDL	80000010	SYSSP1_VECTOR	LIB\$FIXUP_DEC
SYSSCLI	7FFFEDE18	SYSSP1_VECTOR	CLIS\$INTERFACE
SYSSCREMBX	7FFFEDEB8	SYSSP1_VECTOR	UTIL\$CHK_CLI
SYSSCREPRC	7FFFEDEC0	SYSSP1_VECTOR	UTIL\$CHK_CLI
SYSSDASSGN	7FFFEDEE0	SYSSP1_VECTOR	UTIL\$CHK_CLI
SYSS\$EXIT	7FFFEDF40	SYSSP1_VECTOR	UTIL\$CHK_CLI
SYSS\$FAO	7FFFEDF50	SYSSP1_VECTOR	UTIL\$CHK_CLI
SYSS\$FAOL	7FFFEDF58	SYSSP1_VECTOR	SOR\$OUTPUT
SYSS\$GETDVIW	7FFFE418	SYSSP1_VECTOR	UTIL\$CHK_CLI
SYSS\$GETJPI	7FFFE0D8	SYSSP1_VECTOR	SOR\$ENTRY
SYSS\$GETJPIW	7FFFE420	SYSSP1_VECTOR	UTIL\$CHK_CLI
SYSS\$GETTIM	7FFFEDF78	SYSSP1_VECTOR	SOR\$ENTRY
SYSS\$PUTMSG	7FFFE0E0	SYSSP1_VECTOR	SOR\$OUTPUT
SYSS\$QIOW	7FFFEDE00	SYSSP1_VECTOR	UTIL\$CHK_CLI
SYSS\$UNWIND	7FFFE070	SYSSP1_VECTOR	LIB\$FIXUP_DEC

UTIL\$CHK_CLI

Value	Symbols...
-----	-----
000381F0	CLIS_ABSENT
000381F8	CLIS_NEGATED
00038230	CLIS_LOCNEG
0003880A	CLIS_INVQUAL
00038822	CLIS_INVREQTYP
00038832	CLIS_VALCNVERR
0003FD01	CLIS_SPAWNED
0003FD19	CLIS_PRESENT
0003FD21	CLIS_DEFAULTED
0003FD29	CLIS_CONCAT
0003FD31	CLIS_LOCPRES
0003FD39	CLIS_COMMA
00158204	LIBS_BADSTA
001C8142	SORS_ROPRAND
7FFEDE00	SYSSQIOW
7FFEDE18	SYSSCLI
7FFEDEB8	SYSSCREMBX
7FFEDECO	SYSSCREPRC
7FFEDEEO	SYSSDASSGN
7FFEDF40	SYSS\$EXIT
7FFEDF50	SYSS\$FAO
7FFEDF58	SYSS\$FAOL
7FFEDF78	SYSS\$GETTIM
7FFEE070	SYSSUNWIND
7FFEE0D8	SYSS\$GETJPI
7FFEE0E0	SYSS\$PUTMSG
7FFEE418	SYSS\$GETDVIW
7FFEE420	SYSS\$GETJPIW
80000010	SYSS\$CALL_HANDL

Key for special characters above:

*	- Undefined
U	- Universal
R	- Relocatable
X	- External

! Image Synopsis !

```

Virtual memory allocated: 00000200 000027FF 00002600 (9728. bytes, 19. pages)
Stack size: 20. pages
Image header virtual block limits: 1. ( 1. block)
Image binary virtual block limits: 2. 20. ( 19. blocks)
Image name and identification: SORTMERGE V04-000
Number of files: 6.
Number of modules: 11.
Number of program sections: 10.
Number of global symbols: 424.
Number of cross references: 189.
Number of image sections: 10.
User transfer address: 000002B1
Number of code references to shareable images: 15.
Image type: EXECUTABLE.
Map format: FULL WITH CROSS REFERENCE in file _$255$DUA28:[SORT32.LIS]SORTMERGE.MAP;1
Estimated map length: 90. blocks

```

```

+-----+
! Link Run Statistics !
+-----+

```

Performance Indicators	Page Faults	CPU Time	Elapsed Time
Command processing:	140	00:00:00.44	00:00:01.10
Pass 1:	167	00:00:01.39	00:00:11.99
Allocation/Relocation:	29	00:00:00.14	00:00:01.48
Pass 2:	55	00:00:00.89	00:00:04.40
Map data after object module synopsis:	23	00:00:00.68	00:00:00.81
Symbol table output:	1	00:00:00.01	00:00:00.55
Total run values:	415	00:00:03.55	00:00:20.33

Using a working set limited to 1200 pages and 84 pages of data storage (excluding image)

Total number object records read (both passes): 379
of which 176 were in libraries and 0 were DEBUG data records containing 0 bytes

```
Number of modules extracted explicitly          = 5
with 4 extracted to resolve undefined symbols
```

26 Library searches were for symbols not in the library searched

A total of 0 global symbol table records was written

```
LINK=USERLIB=PROC/NOTRACE/EXE=EXES: SORTMERGE/MAP=MAPS: SORTMERGE/FULL/CROSS LIBS: SORTMERGE/INCL=(SOR$ENTRY, SOR$COMMAND, UTIL$CHK_CLI, S  
OR$OUTPUT, LIB$FIXUP_DEC), SYSS$INPUT/OPTIONS  
EXES: SORT$HR/SHARE  
PSECT=$PLITS, PIC, SHR, EXE  
PSECT=$CODES, PIC, SHR  
COLLECT=CODE, $CODES, $PLITS, SOR$RO_CODE, _LIB$CODE
```

[illegible]

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